CURRENT THERAPEUTICS AND PROGNOSTICS ABOUT COLO-RECTAL CANCER

-DOCTORAL THESIS-

ABSTRACT

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INTRODUCTION
News investigations in the field of colorectal cancer (CRC) has been imposed by the continuous increase of the incidence of disease in developed countries, which already register high levels of prevalence and also in countries formerly where the rates increase gradually.

Need to this study are represented by detection and prevention of CRC who remains with no doubt a major problem of public health.

Decade 1990-2000 was the decade of CRC detection and prevention, and the decade 2000-2010 is the period of application of new diagnostic and therapeutic concepts.

OBJECTIVES
This paper presents in the first part the state of the problem, analyze the dates of classical and modern anatomy, epidemiology and etiopathogeny, pathology, cancer diagnostic and therapeutic attitude in this disease.

Part II of the paper entitled "Personal research” includes the study of aspects of current therapeutic strategies proposed for colorectal cancer and their prognosis.

The objectives of this paper, entitled "Current therapeutics and prognostics about colo-rectal cancer”, were:
1. epidemiological knowledge of colorectal cancer in the country and the region;
2. achieving a modern prospective study on colorectal cancer diagnosis;
3. retrospective study of diagnostic and therapeutic strategies for colorectal cancer,
4. retrospective study on the survival of the group with colorectal cancer according to demographic parameters, clinics, morphological, stage and therapeutic;
5. comparing their results with the literature research;
6. deduction of conclusions from the analysis of case law targets studied.
MATERIAL AND METHODS

A. Material

We studied prospectively and retrospectively 134 patients with colorectal cancer, who underwent tumor resection, in Emergency County Hospital of Craiova in all three clinics of general surgery, from January 2003 until December 2005. The study cohort represented the period of three years. Centralization of the lot, both demographically and pathologically was facilitated by database Pathology Clinical Emergency County Hospital Craiova and thus this prospective study to identify cases of colorectal cancer, their evolution reported to the clinical, pathological, anatomic and therapeutic highlighted.

B. Method

Processed results from the observation sheets, discharge sheet of the patients and histopathological examination papers. Data on survival at July 01.2010 - when ending the tracking of patients in the lot - came from the Registry of Civil Status of the Office of Evidence of Populations from Craiova.

Inclusion criteria were the diagnosis of colon or rectal cancer, pre-or postoperatively, with histopathological confirmation and type of surgical resection. Cases were excluded from the study who underwent endoscopic treatment, cases in which colorectal tumor could not be extirpated, those where the intervention of colorectal resection was performed for diseases such as familial adenomatous polyposis, reintegration in transit after previous interventions (Hartmann) and those without resection followed by anastomosis (like lateral colostomy in colorectal cancers, presented in bowel obstruction). After primary selection, patients were studied in groups according to the parameter sought: demographic data, clinical data, staging, morphological, therapeutic data. Related to these parameters, prognosis and survival of patients was examined in the batch.

For statistical processing of data were used the following types of statistical tests: tests to measure the dependence between the parameters (chi squared) and significance tests (Student, Anova, Wilcoxon and log-rank).

The main statistical analysis software packages were Microsoft Excel 2003 and Epi Info 2000. Were drawn by Kaplan-Meier survival curves.
RESULTS

Analysis of 134 hospitalized cases of CRC and resected in SCJU Craiova, between January 2003 - December 2005 revealed some important demographic survival at 5 years after surgery.

From the initial group of 302 patients identified with CRC, noted a significant increase in the incidence with 29.88% (p < 0.05) in 2005 compared to 2003, which can be explained by the general trend of development of this malignancies, but also by the fact that the population is increasing the reach of gastroenterology, surgery and oncology specialist services. However, in the cohort studied to show a downward trend in the number of cases with tumor resection is practiced by 45.9% (p <0.05) in 2003-2005 for the same reasons, or patients presenting in an advanced stage of disease in which tumor resection is not curative.

Analyzing group, 51 patients were alive at July.01.2010, time of survived on average was 73.54 + / -10.47 months. The remaining 83 patients who died before that date, had a disease-free interval of 26.4 + / -20.88 months. The average duration of survival of the entire group is 44.35 + / - 28.94 months.

Comparing the overall survival in months during year reported in surgery, we see that the 61 patients operated on in 2003 lived, on average 47.19 + / -33.39 months, the 40 in 2004, with 43.37 + / - 26.8 months and the 33 in 2005, with 40.27 + / -21.96 months, these values have no statistical significance (p <0.05).

The average duration of survival ranged from 57.07 + / -6.57 months in the right hemicolectomy, 47.6 + / -4.9 months in the left hemicolectomy, 46.3 + / -8.26 months in the amputation of the rectum, 44.75 + / -11.32 months in the subtotal colectomy, 41.15 + / -4.81 months in the recto-sigmoidian resections and 31.75 + / -11.76 months in the transverse colectomy, these values were not significant.

TMN staging of the 134 patients with CRC who underwent tumor resection revealed as expected, the high percentage of survivors of stage I (four patients - 80.0%), followed by those in stage II (11 patients - 73 , 33%). 48.64% of stage III patients have survived at the end of prospects, while no patient in stage IV was not found at July.01.2010.
CONCLUSIONS

- Colorectal cancer is the third cancer in frequency in men (663,000 cases, representing 10.0% of all malignancies) and second in women (570,000 cases, 9.4% of all malignancies) worldwide.
- News research into colorectal cancer is imposed by a continued increase in the incidence of disease in developed countries, which already register high levels of prevalence, and also in countries formerly were CRC rates are increasing.
- Early diagnosis of colorectal cancer should become easier as the application, although it is difficult to implement national technical reasons, demographic, organizational, and high cost.
- Increased incidence of CRC associated with increases in both prevalence and mortality of this disease, suggesting that current methods of treatment, only few cases are actually curable, with a tendency to heal, rest is only temporary extension interventions to limit disease.
- In Romania, between 2003-2005, CRC occupies second place among cancers in men (after lung cancer) and third in women (after breast cancer and cervical cancer).
- Increased incidence of colorectal cancer and the declining number of cases with tumor resection practiced between 2003-2005 could be explained by the broader public access to the methods of early diagnosis of CRC, early stage endoscopic treatment, or patients presenting in an advanced stage of disease and the tumor resection is not practicable.
- The distribution by sex, throughout the period studied, shows the predominance of male cases, compared with a general B / F = 1.43:1, declining 43.33% between 2003-2005.
- After the environment of origin, we found a ratio urban / rural = 79/55 = 1.43.
- Age range was between 33 and 91 years, with an average of 65.3 ± / - 11.37 years. 82 patients (61.19%) were aged between 60-79 years. The best average survival time was in the decade 40-49 years (61.5 ± / -7.23 months). The age of patients is a very highly significant prognostic factor in patients with CRC statistically.
• 69 (51.49%) of surgeries were performed in the emergency thanks of complications showed by patients on admission and 65 (48.5%) elective interventions were practiced.

• The location of the tumor revealed that 88 (65.6%) patients had colon cancer and 43 (34.3%) rectal tumors. There were no significant associations of elderly with proximal locations of CCR and no report of the phenomenon of "migration" to proximal.

• Postoperative complications, local - septic or technical - and general are the privilege of emergency surgery, but also of elderly patients.

• Macroscopically, infiltrative and ulcerated-vegetant forms are most frequently found in equal numbers. Microscopically, we met in order the following types of adenocarcinoma: tubular, mucipar, papillary and other microscopic forms (stromal tumors, sarcomas, etc.). The best survival it is at patients who had a ADK G1 grading, with a 81.33 months averaging life expectancy, followed by those with ADK G2.

• TMN staging of casas show that the stage III are the large (74 cases - 52.22%), followed by stage IV (40 cases - 29.85%), stage II (15 cases - 11.19%) and stage I, which is lowest number of cases (5 cases - 3.73%).

• The average length of survival of the entire batch of 134 cases was 44.35 +/- 29.94 months.

• Factors that contribute to a favorable prognosis in CRC are female gender, urban environement origin, younger than 50 years, the absence of disease or complications associated with neoplasia, colic locations, elective surgery, vegetant and papillary forms, G1 and G2 grading and the disease diagnosed in TMN stages I and II.

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